

Remarks

The various parts of the Office Action (and other matters, if any) are discussed below under appropriate headings.

Claim Amendments

Entry of the amendments to claim 1 is respectfully requested. The amendments are being made to address the comments first made by the Examiner in the Final Office Action. The comments were made by the Examiner regarding a lack of clarity with respect to the definition of stiffness of claim 1. Any lack of clarity is believed to be addressed herein. The amendments could not have been made previously because the nature of the Examiner's confusion was previously unknown.

Claim 18 has been amended to make the claim directly dependent on claim 2, instead of indirectly dependent, in view of the Examiner's comments first made in the Final Office Action.

Claim 20 has been cancelled.

In any event, the amendments reduce the issues outstanding and are believed to place claim 1 in condition for allowance. If the amendments are entered and resolve the issues in regard to claim 1, then all claims should be allowable for at least the same reasons.

Drawing objection

The amendment to Fig. 4 filed January 31, 2011 has been objected for introducing new matter. It is submitted that the amendment does not introduce new matter, and therefore this objection should be withdrawn.

Fig. 4, as described in the specification on page 4, lines 8-10, is a schematic illustration. A schematic illustration simply represents elements using abstract symbols rather than realistic pictures, and therefore any particular shape tip shown in Fig. 4 is nothing more than a schematic illustration of what is described in the specification.

Claim rejections – 35 USC 112

The Examiner has rejected claims 1-10, 18, 20, and 21 under 35 U.S.C. 112 for failing to comply with the written description requirement, failing to comply with the enablement requirement, and failing to particularly point out and distinctly claim the

subject matter which applicant regards as the invention, particularly with respect to the definition of stiffness in claim 1.

Claim 1 has been amended to clarify this definition. The definition of stiffness set out in amended claim 1 provides the skilled person with sufficient information to determine the stiffness of a particular length of guidewire. In the guidewire as recited in claim 1, there are two lengths of guidewire each having a different stiffness, namely the proximal end of the wire and the distal end of the wire. Thus the length of guidewire in the definition refers to a portion of a single guidewire (either the proximal end or the distal end in this case).

Claim 1 therefore includes a definition of stiffness, and this definition does not necessarily relate to how the guidewire is used. This means, that in use, the distal end of the guidewire may not be laterally constrained but nevertheless the stiffness has been defined for a situation where one end is restrained. Since this portion of the claim language provides a definition of stiffness it does not refer to the way in which the guidewire is used.

The original wording of the definition did not include reference to the fact that one end of the hypothetical length of guidewire was laterally constrained. However it is implicit that at least one end must be constrained since otherwise, if a force were to be applied to a point 10 mm from the distal end of the length of guidewire, the whole guidewire would move rather than the force producing an angular lateral displacement of the wire. An angular lateral displacement requires that one end of the length of wire is not constrained, whilst the other end is.

The meaning of the Examiner's objection that "the limitations were not described in the application, as filed, in a manner that indicated that the applicant had possession of them in at the time of filing" is unclear. In particular the feature that applied force is "at a distance of 10 mm from the distal end of the respective length of guidewire" has been contained in the application, in claim 1, since filing.

As mentioned above, if a force is to result in angular displacement, it is implicit that one end of the length of guidewire being considered must have a fixed position in order that the guidewire can effectively rotate and therefore produce an angular displacement. It is unclear, therefore, why the Examiner does not understand how a force could result in an angular displacement.

The Examiner goes on to assert that it is unclear how the stiffness of the proximal end can be measured when the proximal end is laterally constrained and yet stiffness is defined by applying a force 10 mm from the distal end of the respective length.

It is hoped that the amendment to claim 1 will enable the Examiner to understand how stiffness is being defined in claim 1. Withdrawal of this rejection is therefore requested.

The Office Action also rejects claim 18 as being an improper dependent claim for failing to include all the limitations of the claim upon which it depends and/or for failing to further limit the subject matter of the claim upon which it depends. Without acquiescing to this assertion, claim 18 has been amended to depend from claim 2, rendering moot this rejection. Withdrawal of this rejection is respectfully requested.

Response to Arguments

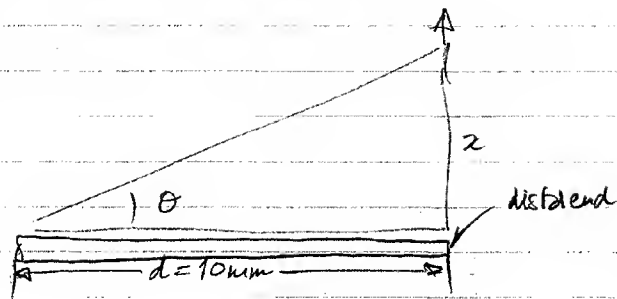
Turning now to the Examiner's comments on how Newtons were converted to grams per millimeter, shown below in Fig. 1 is a copy of some hand calculations which may be helpful to the Examiner.

$$10 \text{ N} \equiv 1 \text{ kg} = 1000 \text{ g}$$

$$1 \text{ N} \equiv 100 \text{ g}$$

DATE
01/12/10
ACTION

Lateral displacement of guidewire



$$\tan \theta = \frac{x}{d} \quad \theta = 30^\circ ; d = 10 \text{ mm}$$

$$\Rightarrow x = d \cdot \tan \theta = 10 \cdot \tan 30^\circ$$

$$\Rightarrow x = 5.77 \text{ mm} \quad \text{--- lateral displacement}$$

Proximal end $10 \text{ N} \Rightarrow \frac{10 \text{ N}}{5.77 \text{ mm}} = 1.73 \text{ N/mm}$

$$\equiv 173.3 \text{ g/mm}$$

[Fig 14 Cor]
↓
29 g/mm

Distal end $3 \text{ N} \Rightarrow \frac{3 \text{ N}}{5.77 \text{ mm}} = 0.52 \text{ N/mm}$

$$\equiv 52 \text{ g/mm}$$

[Fig 15 Cor]
↓
21 g/mm

Intermediate $5 \text{ N} \Rightarrow \frac{5 \text{ N}}{5.77 \text{ mm}} = 0.866 \text{ N/mm}$

$$\equiv 86.6 \text{ g/mm}$$

[Fig 15 Cor]
→ 57 g/mm

$8 \text{ N} \Rightarrow \frac{8 \text{ N}}{5.77 \text{ mm}} = 1.386 \text{ N/mm}$

$$\equiv 138.6 \text{ g/mm}$$

[Fig 14 Cor]
↓
20 g/mm

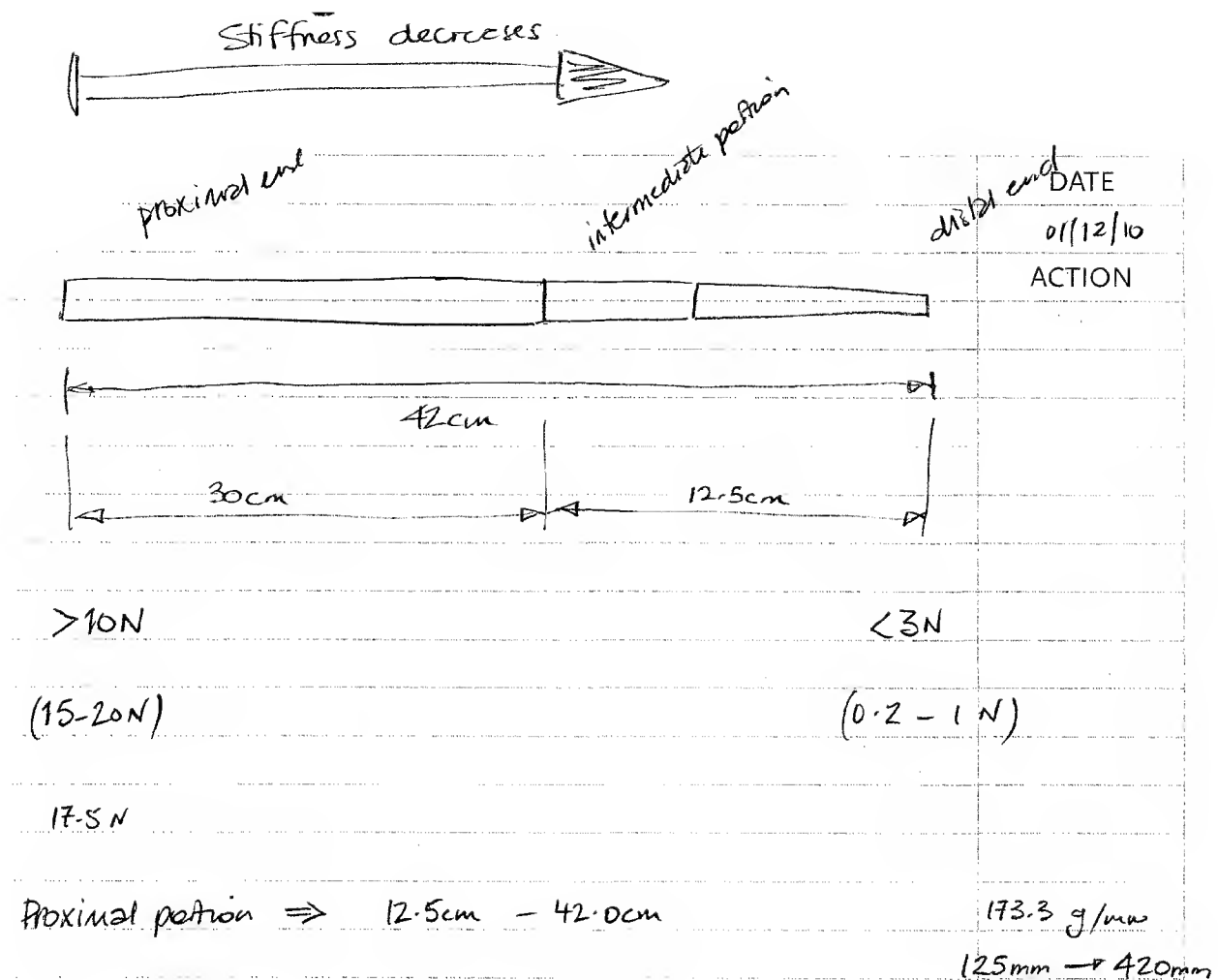


Fig. 1

In essence, if the hypothetical length of guidewire has been displaced by 30 degrees, then the vertical distance through which the point of the length of guidewire which is 10 mm from one end (i.e. the point of which the force is applied) will have moved through a distance of 5.77 mm using the equation $\tan \theta = x/d$ where D is 10 mm and θ is 30 degrees.

It is noted that the Examiner has stated that once provided with an explanation of how these conversions have been calculated, the Examiner will review the relevance of the prior art and any previous argumentation, and thus it is our understanding that no further comments on the prior art are necessary at this stage.

The absence in this reply of any comments on the other contentions set forth in the Office Action should not be construed to be an acquiescence therein. Rather, no comment is needed since the rejections should be withdrawn for at least the foregoing reasons.

Conclusion

In view of the foregoing, request is made for timely issuance of a notice of allowance.

Respectfully submitted,

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